UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: APR 08 1992

SUBJECT: ACTION MEMORANDUM - Request for a Removal Action at the Schreiber/Caravan Drum Site, Detroit, Wayne County, Michigan (Site Spill ID #PY)

FROM: Peter F. Guria, On-Scene Coordinator
Emergency and Enforcement Response Branch, Section 1

TO: Norman R. Niedergang, Associate Division Director
Office of Superfund

THRU: Robert J. Bowden, Chief
Emergency and Enforcement Response Branch

I. PURPOSE

The purpose of this memorandum is to obtain your approval to expend up to $147,410 to mitigate threats to human health and the environment posed by the presence of uncontrolled hazardous substances located at the Schreiber/Caravan Drum Site, 3033 Bourke Avenue, Detroit, Wayne County, Michigan. The proposed removal action seeks to abate the release of hazardous substances and materials by removing rapidly deteriorating drums containing extremely high levels of volatile organic compounds and flammable liquids listed under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It is estimated that the removal action will require 10 on-site working days to complete.

The site is not on the National Priorities List (NPL).

II. SITE CONDITIONS

CERCLIS ID# MID 985 630 185.

The proposed removal action at the Schreiber/Caravan Drum Site is a time-critical emergency due to conditions at the site. The On-Scene Coordinator (OSC) and U.S. Environmental Protection Agency (U.S. EPA) Technical Assistance Team (TAT) conducted a site assessment on December 19, 1991, and documented site conditions.

Fourteen drums of unknown contents were observed scattered in a small wooded area (approximately 20 feet x 60 feet) east of the Caravan facility. The drums were found scattered amongst a large tar boiler, many open and releasing their contents. Contaminated soil was observed beneath and immediately adjacent to the drums. The site perimeter consists of an 8-foot chain link fence to the east and south, a wall of the Caravan building to the west, and a gate between

the building and east fence to the north. Access to the site is not completely restricted, and evidence of vandalism and trespass through the south portion of the perimeter fence has been observed.

Analytical results of liquid samples collected from the drums has revealed extremely elevated levels of volatile organic compounds such as xylene, ethyl benzene, benzene, and toluene. Xylene, ethyl benzene, and toluene have flash points of 81, 59, and 40 degrees Fahrenheit (°F), respectively, indicating the presence of ignitable hazardous waste under the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 40 CFR 261.24. Many of the drums found on site were in various stages of deterioration, many open and on their sides, releasing their contents.

III. PHYSICAL LOCATION

The Schreiber/Caravan Drum site is located at 3033 Bourke Avenue, Detroit, Wayne County, Michigan. The facility is bordered to the north by Bourke Avenue and private residences, to the south by the Consolidated Rail Corporation (CONRAIL) railroad tracks, to the east by a hospital laundry processing facility, and to the west by an abandoned automotive spring manufacturing facility.

In 1990, the population of Detroit, Michigan, was 1,027,974 (U.S. Bureau of the Census). Population within one square city block of the facility is approximately 1,500. Area land use is primarily residential and industrial.

IV. SITE DESCRIPTION AND BACKGROUND

The property and buildings located at 3033 Bourke Avenue were initially operated by the Schreiber Roofing Company from at least 1980 to November 1983 and were primarily used as a storage facility for roofing materials and equipment.

In November 1983, the property was sold to the Caravan Chemical Company who operated the facility as a manufacturer of industrial and commercial surfactants.

On January 2, 1985, the property was transferred from the Caravan Chemical Company to R.L. Enterprises, Inc., who currently operate the facility as a manufacturer of industrial and commercial surfactants.

On December 9, 1991, the U.S. EPA OSC observed a tar boiler and several drums in various stages of deterioration in a small wooded area east of the Caravan facility. Many of the drums were laying on their sides and appeared to be leaking. The OSC approached the owner of the Caravan facility and expressed concern over the abandoned drums. The owner stated that he did not think the drums belonged to the facility but were from the previous tenant, a roofing company.

On December 19, 1991, the TAT and OSC conducted a site assessment of the Caravan facility. Fourteen drums of unknown contents were observed scattered in a small wooded area (approximately 20 feet x 60 feet) east of the Caravan building. The drums were found scattered amongst a large tar boiler, many open and releasing their contents. Soil contamination was observed in the area of the leaking drums and under the tar boiler. Access to the small wooded area was somewhat restricted, with a fence to the east and south, a wall of the Caravan building to the west, and a gate to the north. The fence along the southern portion of the area was cut open, indicating that trespass had occurred.

Analytical results of liquid and soil samples collected from drums and their affected spill areas revealed elevated levels of volatile organic chemicals such as xylene, toluene, naphthalene, benzene, and ethyl benzene. Xylene, ethyl benzene and toluene have flash points of 81, 59, and 40 °F respectively, indicating the presence of ignitable hazardous waste under the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. ss 6901, et seq., and 40 CFR ss 261.24. One sample revealed the presence of benzene above the Toxicity Characteristic Leachate Procedure (TCLP) regulatory limit for that compound. The analytical results from these drum samples also revealed the presence of polycyclic aromatic hydrocarbons (PAHs) such as benzo (b) fluoranthene, and benzo (a) pyrene which have been shown to cause cancer and mutations in laboratory animals.

V. OTHER ACTIONS TO DATE

On February 12, 1992, a meeting was held with representatives of the U.S. EPA and the potentially responsible parties (PRPs) to discuss cleanup activities needed at the site. See the Enforcement Confidential Addendum for information regarding this meeting.

The proposed cleanup activities described in this action memorandum have been discussed with Mary Vanderlaan of the Michigan Department of Natural Resources Emergency Response Division (MDNR-ERD), Livonia, Michigan, office.

VI. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions at the Schreiber/Caravan Drum Site present an imminent and substantial endangerment to public health, or welfare, or the environment based upon factors set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR 300.415 (b)(2). These factors include:

a) actual or potential exposure to hazardous substances by nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

This factor is present at the facility due to the existence of high concentrations of xylene (300,000 ppm), ethyl benzene (83,000 ppm), toluene (5,600 ppm), naphthalene (14,000 ppm), and polycyclic aromatic hydrocarbons (ranging between 3,900 and 5,200 ppm) contained in drums found on site. Analytical results have revealed benzene at 5.0 ppm, which is above the regulatory TCLP limit of 0.5 ppm for that compound. Access to the site is not completely restricted and evidence of vandalism and trespass through the south portion of the perimeter fence has been observed. An elementary school and playground are located approximately 2,000 feet to the north. Children have been observed on several occasions passing along the railroad easement adjacent to the site to reach the playground and school. The National Institute for Occupational Safety and Health (NIOSH) has listed toluene, xylene, and naphthalene as an immediate danger to life and health (IDLH) at concentrations of 2,000 ppm, 1,000 ppm, and 500 ppm, respectively. The potential for exposure via direct contact is high should access to the facility continue to be unrestricted.

b) hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

This factor is present at the facility due to the existence of drums containing high concentrations of xylene (300,000 ppm), toluene (5,600 ppm), ethyl benzene (83,000 ppm), naphthalene (14,000 ppm), benzene (5.0 ppm TCLP), and polycyclic aromatic hydrocarbons. Air monitoring conducted with a photoionization detector (Hnu) in the bung opening of the drums revealed levels of volatile compounds ranging between 50 and 100 units. Some of the drums were found open and on their sides, releasing their contents. Soil samples collected from the areas where leaking drums have been observed has revealed high concentrations of volatile organic compounds ranging between 3,800 and 1,400 ppm, and polycyclic aromatic hydrocarbons ranging between 940 and 280 ppm.

c) high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate;

This factor is present at the site due to existence of soil samples which reveal extremely elevated levels of volatile organic compounds such as ethyl benzene (3,700 ppm), xylene (3,800 ppm), naphthalene (2,900 ppm), and polycyclic aromatic hydrocarbons ranging from 170 to 200 ppm. Surface water runoff is to the south along the railroad easement. This easement is frequently used as a pathway by children to and from the local elementary school and playground located nearby.

d) weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

This factor is present at the site due to the exposure of the drums to the natural elements. Continued exposure of the drums to the outside

elements would allow further deterioration, leading to a potential release of their contents. The railroad easement is used by children to reach the school and playground nearby. Surface water runoff flows in the direction of the easement and is a natural pathway for contaminates released from the drums during periods of heavy precipitation. The threat of direct contact to children passing along this route is high.

e) threat of fire or explosion;

This factor is present at the facility due to the existence of drums containing high levels of ethyl benzene, toluene, and xylene. These chemicals have flash points ranging between 41 and 81 °F and an upper and lower flammability range between 6.7 and 1.0 percent. Analytical results have revealed that one drum alone contains 30 percent (300,000 ppm) xylene, which results in a highly flammable and explosive condition. A large volume of abandoned tires have been found along the CONRAIL easement to the south of the site. On several occasions, vandals have set these tires on fire prompting the fire department to respond and extinguish the blazes. If the drums were to be ignited, residual material which may be present in the tar boiler could provide an additional combustion source and allow the fire to spread to the Caravan building and possibly the 12 residential structures bordering the facility to the north.

f) the unavailability of other appropriate Federal or State response mechanisms to respond to the release;

This factor supports the actions required by this Order at the facility because the MDNR currently does not have the necessary funding to respond to this time-critical situation.

VII. ENDANGERMENT DETERMINATION

The leaking abandoned drums containing extremely high levels of chlorinated chemical and flammable solvents create a potential fire and explosion threat which could affect the nearby private homes and commercial businesses. The elevated levels of chlorinated solvents and other hazardous substances, as defined by the Resource Conservation and Recovery Act (RCRA), create a potential direct contact threat to people entering the site through unrestricted access.

Continued deterioration of the drums and the actual or threatened releases of hazardous substances, if not addressed by implementing the response action proposed in this action memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

VIII. PROPOSED ACTIONS AND ESTIMATED COSTS

The purpose of this removal action is to mitigate the imminent and substantial threats posed to public health, or welfare, or the environment. Removal activities at the site are to include: stabilization, sampling, and characterization of all drummed hazardous substances; soil sampling to determine the extent of all surface contamination; excavation of all identified contaminated soil; and disposal of all characterized wastes identified and generated during removal activities.

Specifically, the following removal activities are proposed:

1) Develop and implement site safety and security measures.
2) Implement an air monitoring program during site activities.
3) Stage, sample, characterize, and overpack, if necessary, all drummed and containerized hazardous substances, pollutants, wastes, or contaminants found on-site.
4) Conduct a sampling program to characterize the type and extent of soil contamination and conduct post cleanup sampling to verify that all contaminated soil has been removed to cleanup levels as specified by the OSC.
5) Excavate and dispose of all characterized soil contamination at a RCRA/CERCLA approved disposal facility in accordance with the U.S. EPA off-site policy.
6) Transport and dispose of all characterized drummed hazardous substances, pollutants, wastes, or contaminants at a RCRA/CERCLA approved disposal facility in accordance with the U.S. EPA off-site policy.

Removal activities will require approximately 10 on-site working days to complete. The threats posed by drums containing flammable liquids, high levels of volatile compounds, and associated contaminated surface soil meet the criteria listed in section 300.415(b)(2) of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) and are consistent with any long-term remedial action which may be required.

The OSC has begun planning for the provision of post removal site control, consistent with the provisions of Section 300.415(k) of the NCP. The nature of this removal, elimination of all surface threats, is, however, expected to minimize the need for post removal site control.

The detailed cleanup contractor costs are presented in Attachment 1 and estimated project costs are summarized below:

EXTRAMURAL COSTS	
Cleanup Contractor	$100,000.00
Contingency (15%)	15,000.00
Subtotal	$115,000.00
Total TAT, including multiplier costs	7,200.00
Extramural Subtotal	$122,200.00
Extramural Contingency (15%)	$ 18,330.00
TOTAL, EXTRAMURAL COSTS:	$140,530.00
INTRAMURAL COSTS:	
U.S. EPA Direct Costs [$30/hr x (80 Regional + 8 HQ hrs)	$ 2,640.00
U.S. EPA Indirect Costs [$53/hr x (80 Regional hrs)]	$ 4,240.00
TOTAL, INTRAMURAL COSTS	$ 6,880.00
TOTAL REMOVAL PROJECT CEILING ESTIMATE	$147,410.00

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Applicable or Relevant and Appropriate Requirements (ARARs)

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. A letter has been sent to Peter Ollila of the Lansing, Michigan, office, of the MDNR-ERD requesting that the MDNR identify state ARARs. Any state ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

IX. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED

Presently, conditions at the site could lead to increased health risks to the surrounding neighborhood should action be delayed. Leaking drums containing elevated levels of volatile organic compounds and flammable liquids have been documented on site. Soil samples have revealed that material from the leaking drums has begun to migrate into surface soil which could be carried off site during periods of increased precipitation. Access to the site is unrestricted and vandalism could lead to an additional release and direct contact of hazardous substances contained in abandoned drums. Any fire or additional release of hazardous substances could lead to exposure of hazardous substances to the nearby residents bordering the site.

X. OUTSTANDING POLICY ISSUES

The proposed removal action is necessary should the responsible parties fail to perform the required removal activities to mitigate the threats posed at Schreiber/Caravan Drum Site.

XI. ENFORCEMENT

For administrative purposes, information concerning confidential enforcement strategy for this site is contained in the Enforcement Addendum.

XII. RECOMMENDATION

This decision document represents the selected removal action for the Schreiber/Caravan Drum site, located in Detroit, Michigan, developed in accordance with CERCLA as amended by SARA, and not inconsistent with the National Contingency Plan. This decision is based upon the administrative record for the site. Attachment 2 identifies the items that comprise the administrative record upon which the selection of the removal is based.

Because the conditions at the Schreiber/Caravan Drum site, located in Detroit, Michigan, meet the National Contingency Plan, Section 300.415(b)(2), criteria for a removal action, your approval of this request is recommended. The estimated total project costs are $147,410, of which up to $140,530, is for extramural contractor costs. You may indicate your decision by signing below.

APPROVE: _____ DATE: 4/9/92
Associate Division Director
Office of Superfund

DISAPPROVE: _____ DATE: _____
Associate Division Director
Office of Superfund

Enforcement Addendum
Attachments
1. Detailed Cleanup Contractor Cost
2. Index to Administrative Record

cc: T. Johnson, OS-210
Alan Howard, MDNR, Superfund Section
Shelia Huff, U.S. Department of the Interior,

bcc: N. Zusman, CS-3T
A. Bauman, HSE-5J
R. Powers/R. Buckley, HSE-GI
R. Bowden, HSE-5J
P. Schafer/M.Messersmith, HSE-5J
L. Fabinski, ATSDR, HS-6J
O. Warnsley, RP/CRU, HS-6J
T. Lesser, P-19J
F. Myers, 5MB-19J
P. Guria, HSE-GI
R. Dumelle, MC-10J
EERB Read File
EERB Delivery Order File (C. Brasher)
EERB Site File

ENFORCEMENT ADDENDUM

Redacted-information not relevant to the selection of the removal action.

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR COST ESTIMATE
SCHREIBER/CARAVAN DRUM SITE
DETROIT, MICHIGAN
FEBRUARY 1992

The estimated cleanup contractor costs are as follows:

ERCS Personnel	$ 20,000.00
ERCS Equipment and Materials	10,000.00
ERCS Subcontractors	10,000.00
Sampling and Analytical	25,000.00
Transportation and Disposal	35,000.00
TOTAL	$100,000.00

ATTACHMENT 2

ADMINISTRATIVE RECORD
FOR
SCHREIBER/CARAVAN DRUMS

DETROIT, MICHIGAN

March 16, 1992

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
02/11/92	Wilde, W., E & E	Heaton, D., U.S. EPA	Site Assessment	107
00/00/00	Guria, P., U.S. EPA	Neidergang, N., U.S. EPA	Action Memorandum (Pending)	